UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,388	06/14/2000	Asil T. Gokcebay	537P	8754

7590	09/29/2004	EXAMINER

Thomas M Freiburger
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EXAMINER
HOLLOWAY III, EDWIN C

ART UNIT	PAPER NUMBER
2635	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

All participants (applicant, applicant's representative, PTO personnel):

(1) _Edwin C. Holloway, III_.   (3)_____.

(2) _Thomas M. Freiburger_.   (4)_____.

Date of Interview: _24 September 2004_.

Type: a)☒ Telephonic   b)☐ Video Conference
c)☐ Personal [copy given to: 1)☐ applicant   2)☐ applicant's representative]

Exhibit shown or demonstration conducted: d)☐ Yes   e)☒ No.
If Yes, brief description: _____.

Claim(s) discussed: _1_.

Identification of prior art discussed: _Stinar (US 5003801) and Bolan (US 4945217)_.

Agreement with respect to the claims f)☐ was reached. g)☒ was not reached. h)☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: _See attached interview summary_.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)
In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
    (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

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Interview Summary

The proposed amendment after final faxed by applicant on 08-13-04 was discussed in the interview. The examiner was not persuaded by applicant's arguments that the rejection of claim 1 under 35 USC 103 is overcome by the proposed amendment for the reasons stated below.

Regarding the DS1207 datasheet, the examiner noted that an IDS with certification, petition and petition fee is required after final for proper consideration of this prior art document.

The argument that the DS1207 simply provides a timing feature is not persuasive because the identification code in the DS1207 having an expiration time is an additional security feature to prevent improper use of the identification code. Regardless, Bolan clearly discloses using the DS1207 for a security function in col. 33 lines 47-54. The argument that this passage does not suggest accessing and unlocking a lock is not persuasive because this passage includes personnel identification badges that are typically used for access to secure facilities. Furthermore, the claims do not require accessing and unlocking a lock.

Applicant's proposed amendment to the preamble, will not be entered at the time because this language was not earlier presented in the claims. Further, this amendment to the

preamble appears to be an intended use that may be given very

little weight. Therefore, the argument that Bolan lacks a key

function for accessing a lock or opening a door is not

persuasive because applicant's claims are directed to a key, not

a lock or door. The body of the claim does not specify a key

function of accessing and unlocking a lock. The examiner

suggested that applicant file an RCE with an amendment claiming

a system including a lock in addition to the key.

The argument that there is no suggestion or motivation to

combine Stinar and Bolan is not persuasive because, for example,

Stinar suggests in col. 3 lines 48-52 that "it is invisioned

that electrically programmable or other nonvolatile memory

devices may be employed where economy or performance

requirements dictate" and Bolan teaches in col. 6 lines 6 and 28

and col. 26 line 65 an innovative system with memory tokens that

are small coin-shaped two-terminal read/write data modules that

are compact, rugged and extremely cheap.

Applicant suggested filing an RCE with evidence of

commercial success or long felt need. The examiner stated that

he would consider such evidence when formally submitted.

CONTACT INFORMATION

Information regarding the status of an application may be
obtained from the Patent Application Information Retrieval
(PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status
information for unpublished applications is available through
Private PAIR only. For more information about the PAIR system,
see http://pair-direct.uspto.gov. Should you have questions on
access to the Private PAIR system, contact an Electronic
Business Center (EBC) representatives at 703-305-3028 or toll
free at 866-217-9197 between the hours of 6 a.m. and midnight
Monday through Friday EST, or by e-mail at ebc@uspto.gov. The
Patent EBC is a complete customer service center that supports
all Patent e-business products and service applications.
Additional information is available on the Patent EBC Web site
at http://www.uspto.gov/ebc/index.html.

Any inquiry of a general nature should be directed to the
Technology Center 2600 receptionist at (571) 272-2600.

Facsimile submissions may be sent via fax number (703) 872-
9306 to customer service for entry by technical support staff.
Questions regarding fax submissions should be directed to
customer service voice line (703) 306-0377.

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to Edwin C.
Holloway, III whose telephone number is (571) 272-3058. The
examiner can normally be reached on M-F (8:30-5:00). If
attempts to reach the examiner by telephone are unsuccessful,
the examiner's supervisor, Michael Horabik can be reached on
(571) 272-3068.

EH
9/26/04

EDWIN C. HOLLOWAY, III
PRIMARY EXAMINER
ART UNIT 2635

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)	Examiner: Edwin C. Holloway
)	
Asil T. Gokcebay et al.)	Group Art Unit: 2835
)	
Serial No.: 09/595,388)	File No: 537P
)	
Filed: June 14, 2000)	
)	
For: CONVENTIONAL MECHANICAL)	Tiburon, California
LOCK CYLINDERS AND KEYS)	
WITH ELECTRONIC ACCESS)	
CONTROL FEATURE)	
)	

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir: **ATTN: MR. HOLLOWAY**

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FOR INTERVIEW ONLY

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING
SENT BY FACSIMILE TO: COMMISSIONER OF PATENTS.
703-746-5841.

ON _8-13-04_

THOMAS M. FREIBURGER REG. NO. 27,063

SIGNED _____

DATE _8-13-04_

PROPOSED AMENDMENT AFTER FINAL

The enclosed proposed amendment to claim 1 is submitted after final rejection, prior to a telephone interview which is being scheduled with Examiner Holloway. It is hoped that the interview can be conducted Monday, August 16. This may depend on whether the Examiner is able to retrieve the file for this case.

The proposed amendment to claim 1 is on the following page.

1.   (Proposed Amendment) A mechanical key device <u>with an</u>
<u>electronic access control feature</u>, formed as a solid unit and
fitted for insertion into a lock <u>to gain access to and unlock</u>
<u>the lock</u>, comprising:

a metal key blade with mechanical bitting to fit a
pattern of a lock,

a key head solidly fixed to the key blade and having a
front end from which the key blade extends,

an electronic identification device or memory cell in
the key head, grounded on one side to the metal key device
and having a data side isolated from the metal key head, the
identification device or memory cell comprising a self-
contained device in the form of a sealed can unit comprising
a conductive metal casing with serial number ID data in a
one-wire bus protocol, the casing of the identification
device or memory cell comprising only two terminals on two
opposed sides, one of which comprises said one side grounded
to metal of the key device and the other being said data
side, the key device having a data contact isolated from
metal of the key device and positioned to engage with a key
reading contact associated with a key slot, the data contact
being connected to said data side of the self-contained
device,

whereby data stored by the electronic identification device or memory cell may be read by reading apparatus when the key device is inserted making said one-wire bus connection.

REMARKS

This proposed amendment is submitted prior to an interview between the attorney and Examiner Holloway. Also submitted is a document, DALLAS SEMICONDUCTOR, DS1207 TimeKey, six pages.

The enclosed article from Dallas Semiconductor explains the nature of the DS1207 TimeKey mentioned in the Bolan reference. This Dallas Semiconductor product, for which the name "TimeKey" is used as a trademark, is sometimes referred to as an electronic key in the Bolan patent. However, it is not a key in the normal sense of the word. It is simply an iButton device which has a timing function, meaning, somewhat roughly, "keying function to time". This timing feature when incorporated in the iButton circuitry can be used, for example, such that a Smartcard or identification device will be valid only for a limited time, or only during certain times.

The fact is that the Bolan reference does not relate to any "key function" in the normal sense of the word, that is, it does not describe anything with respect to accessing a lock or opening a door.

The passage in Bolan at column 33, lines 47 et seq., refers to the DS1207 TimeKey and says that such a device can be used for applications where security is a priority. Examples given are: "Smartcards", personal identification
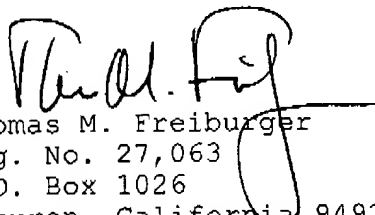
badges, and electronically verified currency. None of these is described as or in way suggests accessing and unlocking a lock. Smartcards, as envisioned in 1989 when the Bolan application was filed, were essentially substitutes for cash, sometimes acting as debit cards. Personnel ID badges and electronically verified currency, just as in Smartcards, would rely on a security or time feature such as the DS1207 simply as an authentication device, not as a "key" that would unlock a lock or access a door.

Even more importantly, Bolan suggests nothing that would lead to or motivate one to incorporate a DS1207 or any other chip in a sealed can of the type described in the claims, into a mechanical key with mechanical bittings.

The courtesy of an interview is appreciated. In this case the applicant waited for more than three years to receive an Examiner action, and thus the applicant desires to avoid the delay occasioned by an appeal.

The attorney will telephone Examiner Holloway on Monday, August 16 regarding a possible interview that day.

Respectfully submitted,

Date: August 13, 2004

Thomas M. Freiburger
Reg. No. 27,063
P.O. Box 1026
Tiburon, California 94920
415-435-0240

DS1207

DALLAS
SEMICONDUCTOR

DS1207
TimeKey

FEATURES

* Cannot be deciphered by reverse engineering

* Time allotment from one day to 512 days for trial periods, rentals, and leasing

* Partitioned memory thwarts pirating

* User-insertable packaging allows personal possession

* Exclusive blank keys on request

* Appropriate identification can be made with a 64-bit reprogrammable memory

* Unreadable 64-bit match code virtually prevents discovery by exhaustive search with over 10^{19} possibilities

* Random data generation on incorrect match codes obscures real accesses

* 384 bits of secure read/write memory create additional barriers by permitting data changes as often as needed

* Rapid erasure of identification, security match code and secure read/write memory can occur if tampering is detected

* Durable and rugged

* Applications include software authorization, gray market software protection, proprietary data, financial transactions, secure personnel areas, and system access control

DESCRIPTION

The DS1207 TimeKey is a miniature security system that stores 64 bits of user-definable identification code and a 64-bit security match code that protects 384 bits of read/write nonvolatile memory. The 64-bit identification code and the security match code are programmed into the TimeKey via a special program mode operation. After programming, the TimeKey follows a procedure with a serial format to retrieve or update data. The TimeKey is set to expire from one day to 512 days or infinity, as
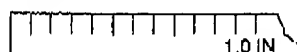
PIN ASSIGNMENT

DALLAS
DS1207
TimeKey

SIDE

BOTTOM: PIN VIEW

1.0 IN

See Mech. Drawings Section

PIN DESCRIPTION

Pin		
Pin 1	NC	No connection
Pin 2	RST	Reset
Pin 3	DQ	Data input/output
Pin 4	CLK	Clock
Pin 5	GND	Ground

specified by the customer. The TimeKey starts its countdown from the first access by the end user.

Interface cost to a microprocessor is minimized by on-chip circuitry that permits data transfer with only three signals: Clock (CLK), Reset (RST) and Data Input/Output (DQ). Low pin count and a guided entry for a mating receptacle overcome mechanical problems normally encountered with conventional integrated circuit packaging, making the device transportable and user-insertable.

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OPERATION – NORMAL MODE

The TimeKey has two modes of operation: normal and program. The normal mode of operation provides the functions of reading and writing the 384-bit ccoure memory. The block diagram (Figure 1) illustrates the main elements of the TimeKey when used in the normal mode. To initiate data transfer with the TimeKey, RST is taken high and 24 bits are loaded into the command register on each low-to-high transition of the CLK input. The command register must match the exact bit pattern which defines normal operations with a function code of read or write. If one of these patterns is not matched, communications are ignored. If the command register is loaded properly, communications are allowed to continue. Data is clocked out of the TimeKey on the high-to-low transition of the clock. If the pattern matched in the command register calls for a normal read or write, the next 64 cycles following the command word are read and data is clocked out of the identification memory. The next 64 write cycles are written to the compare register (Figure 2). These 64 bits must match the exact pattern stored in the security match memory. If a match is not found, access to additional information is denied. Instead, if a normal read mode is selected, random garbled data is output for the next 384 cycles. If a normal write cycle is selected and a match is not achieved, the TimeKey will ignore any additional information. However, when a security match is achieved, access is permitted to write the 384-bit secure memory.

OPERATION - PROGRAM MODE

The program mode of operation provides the functions of programming the identification and security match memory, and setting and reading the amount of time the TimeKey can be used. The block diagram in Figure 3 illustrates the main elements of the TimeKey when used in the program mode. To initiate the program mode, RST is driven high and 24 bits are loaded into the command register on each low-to-high transition of the CLK input. The command register must match the exact bit pattern that defines the program mode for the identification and security match bits or the program mode for setting and reading the amount of time for which the TimeKey can be used. If an exact match for one of the seven function codes of the program mode is not found, the remainder of the program mode is ignored. When the command register is properly loaded for programming the identification and security match bits, the next 128 bits are written to the identification and security match memory (Figure 4). When this mode of operation is invoked, all memory contents are erased.

SETTING AND READING TIME REMAINING

There are six functions of the program mode which are used to set or read the amount of time for which the TimeKey will allow full operation. To initiate any of the six functions of the program mode used for setting and reading time remaining, RST is driven high and 24 bits are loaded into the command register on each low-to-high transition of the CLK input. If the command register is properly loaded with the function code for reading the 20-bit day clock counter, the next 20 bits will be output (LSB first) as a binary count of the amount of time elapsed in the current day (see Figure 5). The time can be calculated by dividing this count reading by 2^{20} (20 bits is equal to 1,048,576 counts). One minus this result is the fraction of a day remaining. The 20-bit day clock counter is driven by an internal oscillator that has a period of 82.4 ms. If the command register is properly loaded with the function code for reading the 9-bit number of days counter, the next 9 bits will be output (LSB first) as a binary count of the days remaining (see Figure 6). This count is decremented each time the day clock counter rolls over to zero. When the number of days remaining counter rolls through zero, normal and program mode write cycles are inhibited. If the program mode read cycle to the number of days counter is attempted, the nine bits will be returned as all ones.

If the command register is properly loaded with the function code for writing the 9-bit number of days counter, the next nine bits will be input (LSB first) as a binary count of the desired number of days in which the TimeKey will be fully functional (see Figure 7). The number of days counter can be changed by writing over an entered value as often as required until the lock command is entered. The lock command is given when the command register is properly loaded with the function code for locking up the number of days counter. The lock command consists of the 24-bit command word only (see Figure 8). Once the lock command is given, all future write cycles to the number of days register are ignored. After the correct value has been written and locked into the number of days counter, the DS1207 will start counting the time from the entered value to zero after the first access to the TimeKey is executed, provided the arm oscillator bit is set. The arm oscillator bit is set when the command register has been properly loaded with the function code for arming the oscillator. The arm oscillator command consists of the 24-bit command word only (see Figure 9). One other command is also available for use in setting and reading time remaining. A stop oscillator command is given when the command register is

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DS1207

properly loaded with the function code for stopping the oscillator. The stop oscillator command consists of the 24-bit command word only (see Figure 10). This command will only execute prior to issuing a lock command. After the lock command is issued, stop oscillator commands are ignored.

A sequence for properly setting the expiration time of the DS1207 is as follows (see Figure 11). First, program the identification and security match bits to the desired value. Use normal mode operation to write the appropriate secure data. Second, write the number days remaining register to the desired value. This number can be immediately verified by reading the number of days remaining. Next, arm the oscillator by writing the appropriate command. Then do a normal mode read. This action will start the internal oscillator. Now read the 20-bit day clock counter several times to verify that the oscillator is running. After oscillator activity has been verified, issue the stop oscillator command. The lock command should be issued, followed by the arm oscillator command. The TimeKey will start the countdown to expiration on the next access. To guarantee security, a locked TimeKey cannot be unlocked. The key cannot be reprogrammed after expiration. The oscillator verification portion of this sequence is not required and can be deleted when speed in setting time remaining is important.

COMMAND WORD
Each data transfer for normal and program mode begins with a 3-byte command word as shown in Figure 12. As defined, the first byte of the command word specifies the function code. Eight function codes are acceptable (Figure 13). If any one of the bits of the first byte of the command word fails to meet one of the exact patterns for function codes, the data transfer will be aborted.

The first two bits of the second byte of the command word specify whether the data transfer to follow is program or normal mode. The bit pattern for program mode is 0 in bit 0 and 1 in bit 1. The bit pattern for normal mode is a 1 in bit 0 and a 0 in bit 1. The other two possible combinations for the first two bits of byte 2 will cause the transfer to abort. The program mode can be invoked with one of seven function codes: program identification and security match, read the 20-bit day clock counter, read the number of days count, write the number of days

count, lock number of days count, arm oscillator, and stop oscillator.

The remaining six bits of byte 2 and the first four bits of byte 3 must be written to match one of the five patterns as indicated in Figure 12 or data transfer will abort. Under special contract with Dallas Semiconductor, these bits can be defined by the user as any bit pattern other than those specified as unavailable. The bit pattern as defined by the user must be written exactly or data transfer will abort. The last four bits of byte 3 of the command word must be written 1011 or data transfer will abort. Table 1 provides a summary of the command words in hexadecimal as they apply to all function codes for both program mode and normal mode.

RESET AND CLOCK CONTROL.
All data transfers are initiated by driving the $\overline{RST}$ input high. The reset input serves three functions. First, it turns on control logic which allows access to the command register for the command sequence. Second, the $\overline{RST}$ signal provides a power source for the cycle to follow. To meet this requirement, a drive source for $\overline{RST}$ of 2 mA at 3.5 volts is required. Third, the $\overline{RST}$ signal provides a method of terminating data transfer.

A clock cycle is a sequence of a falling edge followed by a rising edge. For data inputs, the data must be valid during the rising edge of the clock cycle. Command bits and data bits are input on the rising edge of the clock. Data bits are output on the falling edge of the clock. The rising edge of the clock returns the DQ pin to a high impedance state. All data transfer terminates if the $\overline{RST}$ pin is low and the DQ pin goes to a high impedance state. Data transfer is illustrated in Figure 14 for normal mode and Figure 15 for program mode.

TIMEKEY CONNECTIONS
The TimeKey is designed to be plugged into a standard 5-pin 0.1 inch center SIP receptacle. A guide is provided to prevent the TimeKey from being plugged in backwards and aid in alignment of the receptacle. For portable applications, contact to the TimeKey pins can be determined to ensure connection integrity before data transfer begins. CLK, $\overline{RST}$, and DQ all have 20K ohm pulldown resistors to ground that can be sensed by a reading device.

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07/26/ [rotated/upside-down text at top]

PAGE 9/11 * RCVD AT 8/13/2004 9:09:54 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/0 * DNIS:7465841 * CSID:4154350242 * DURATION (mm-ss):03-46 [rotated]
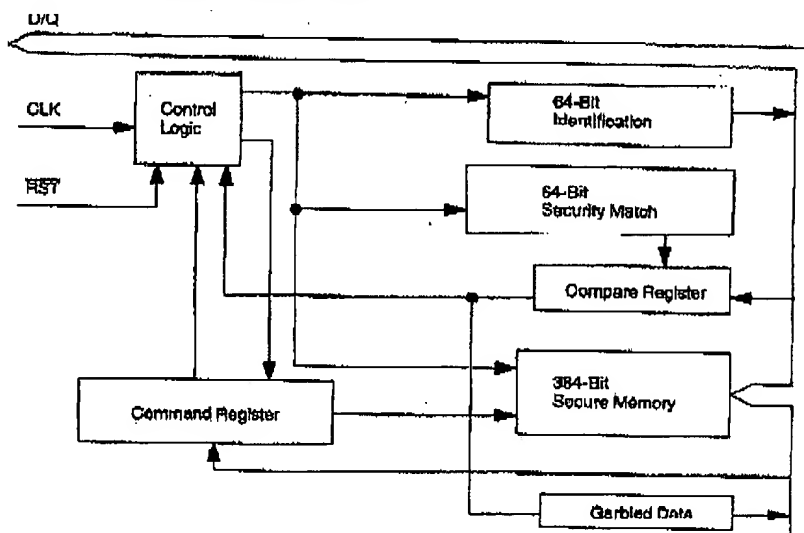
DS1207

COMMAND WORDS Table 1

Summary of the command words in hexadecimal as they apply to all function codes for both program mode and normal mode for the DS1207-G01 only.(See Figure 12 and Figure 13 for detailed command words.)

MODE	FUNCTION	COMMAND WORDS		
		MSB		LSB
NORMAL	READ	B0	01	62
NORMAL	WRITE	B0	01	9D
PROGRAM	WRITE	B0	02	9D
PROGRAM	READ DAY CLOCK COUNTER	B0	02	F1
PROGRAM	READ DAYS REMAINING	B0	02	F3
PROGRAM	WRITE DAYS REMAINING	B0	02	F2
PROGRAM	ARM OSCILLATOR	B0	02	F5
PROGRAM	LOCK NUMBER OF DAYS COUNT	B0	02	F6
PROGRAM	STOP OSCILLATOR	B0	02	F4

BLOCK DIAGRAM: NORMAL MODE Figure 1

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NORMAL MODE: READ OR WRITE SECURE READ/WRITE MEMORY Figure 2A
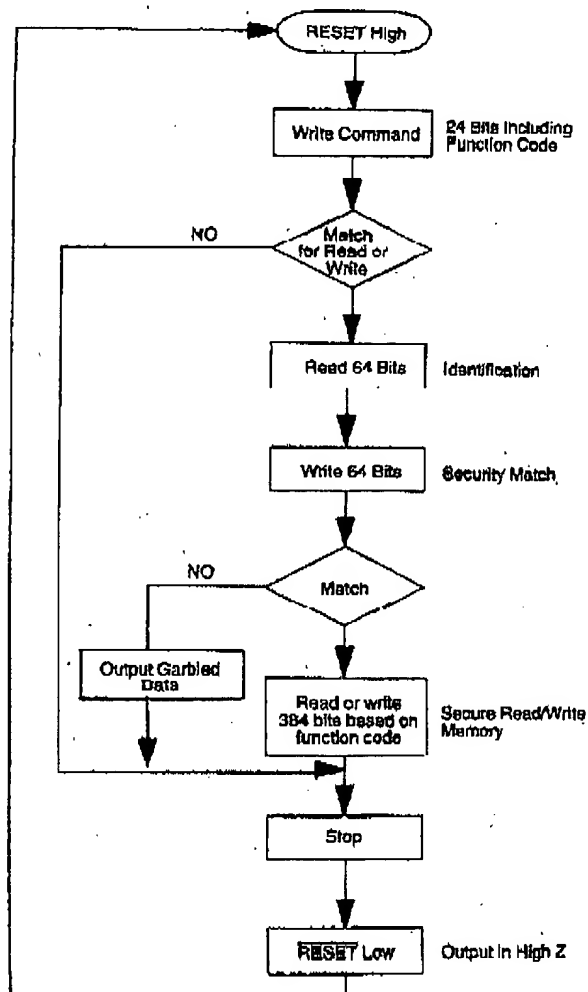
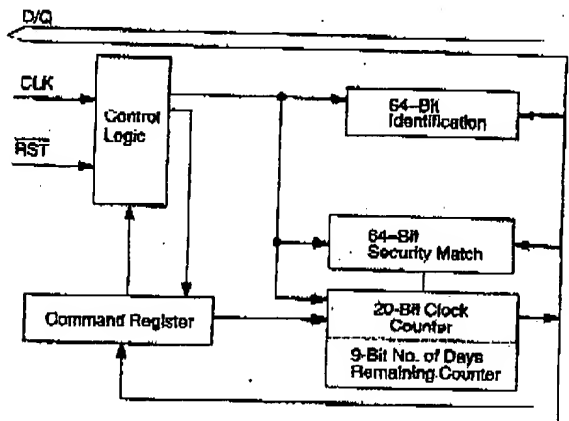D91207

SEQUENCE: NORMAL MODE, READ OR WRITE SECURE MEMORY Figure 2B
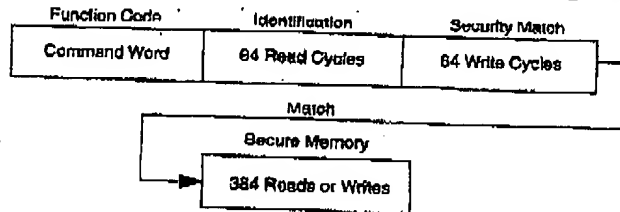
BLOCK DIAGRAM: PROGRAM MODE Figure 3

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